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Alberta Oil Supply

1985 – 2010

March 1985

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ERCB

Energy Resources
Conservation Board

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

News Release

FOR RELEASE AT 9:00 A.M., 17 APRIL 1985

CALGARY, 17 April.....The Energy Resources Conservation Board today predicted that by the year 2010, synthetic crude oil rather than conventional light crude oil will represent two-thirds of the province's total productive oil capacity.

The province's substantial bitumen resources are expected to offset the decline in conventional productive capacity so that a return to present levels of crude oil and equivalent supply of some 220 thousand cubic metres per day is projected in the 1990s.

The Energy Resources Conservation Board made these predictions in ERCB Report 85-A: Alberta Oil Supply 1985-2010. The report provides an oil supply forecast from all sources for the years 1985 to 2010, and is based upon the Board's regular reserves and production analysis functions supplemented by discussions with industry.

Recently, Alberta oil supply has been increasing somewhat due to substantial infill drilling in both light and heavy oil reservoirs, removal of production controls on a large majority of older pools and more liberal allowables for new pools, plus a record number of oil development wells drilled during 1983 and 1984. While several discoveries have been made, no new major oil pools were found and, consequently, light oil supply is expected to continue its historical long-term decline pattern.

More...More...More...

This new forecast updates the forecast made by the Board in 1983 and takes into account recent data including changing performance of Alberta's existing conventional oil pools, the effects of changes in prices and royalty-related incentives, and the relaxation of production allowable controls.

The report also updates the Board's pentanes plus forecast to reflect a more optimistic marketable gas production profile based on expected changes in gas prices and regulatory policies governing the export of gas from Canada.

For more information you are invited to contact the Manager, Economics Department, Frank Mink, at 297-2397.

- 30 -

ERCB

Alberta Oil Supply

1985-2010

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ENERGY RESOURCES CONSERVATION BOARD
ALBERTA OIL SUPPLY

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ABSTRACT

ERCB Report 85-A is a forecast of Alberta's oil supply for the period 1985-2010 from all sources: conventional light (includes medium) and heavy, pentanes plus, and bitumen. It updates ERCB Report 83-E as published in December 1983. An update was warranted at this time because of the changing performance of existing pools, the effects of pricing and royalty-related incentives, and relaxation of production allowable controls. Examples of policy changes introduced in the past few years that have increased productivity above that forecast in ERCB Report 83-E include the following:

- The extension of NORP to infill development wells and changes to the definition and royalty regime applied to exploratory wells.
- NORP pricing and royalty relief applied to miscible flood schemes.
- Changes in gas prices and regulatory policies governing the removal of gas from Alberta, such as domestic incentive payments and pricing and modification of the NEB's export pricing policy.
- Royalty and tax structures applied to oil sands projects.

As in the previous report, the current forecast is derived from an analysis of information assembled by Board staff through its regular reserves and production analysis functions supplemented by discussions with industry. The results assume that pool productive capacity is not restricted by market prorationing or pipeline constraints, and the oil industry is able to function under a relatively stable and economically viable resource policy environment.

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This report was compiled with key participation by Ken Sharp, Terry Hurst, and Lester Newman (Conventional Oil Forecast); Suzanne Sills (Bitumen and Synthetic Crude Oil Forecast); and Harvey Halladay and Lynda Holizki (Pentanes Plus Forecast). Projected drilling activity and overall report preparation was conducted by Ray Towle with assistance from Robert Feick (Economics).

The report was assembled under direction from Frank Mink (Manager, Economics) and Norman Strom (Board Member).

1 INTRODUCTION

Oil industry activity in Alberta is currently regaining some of the momentum lost as a result of the world recessionary environment and the introduction of the National Energy Program (NEP). The decline in overall activity appears to have bottomed out in 1983 as the past year saw an increase in total drilling after a 3-year decline due to a sizeable increase in exploratory and development oil wells, and the reactivation of oil-related projects. The new federal government has raised expectations of a more attractive fiscal regime and the phasing-out of many items included in the original NEP. Indeed, the government has suggested that the health of the energy sector will be instrumental in stimulating economic growth and job creation, and leading the country out of the economic recession.

The current economic climate is improving, and in general, the oil industry is cautiously optimistic that current negotiations between the provincial and federal governments will result in a more favorable fiscal regime and increased cash flows. Nevertheless, uncertainty remains due to unresolved questions of price setting and revenue sharing, the present softening and instability in world oil prices, and the potential effects of deregulation.

The forecast of oil supply as outlined in this report is premised on the supposition that negotiations between the provincial and federal governments will generally benefit the oil industry so that the optimism and activity level characterizing the latter half of 1984 would be sustained. For example, deregulation as one policy recommendation is viewed positively by many in the industry. Moreover, recent changes to the fiscal regime for conventional supply such as the extension of new oil reference price (NORP) to infill development wells and the

expanded definition of exploratory wells with provisions for royalty-free holidays have encouraged historically high levels of drilling for oil. The combined effects of relatively high levels of new oil discoveries and additions to existing pools plus the propensity of infill drilling in enhanced oil recovery projects will mitigate to some extent the previously forecast rate of decline in conventional oil supplies. Likewise, royalty relief and relatively inexpensive gas supplies are assumed to continue to enhance the economics of tertiary miscible flood schemes, and special front-end royalty formulas and tax structures for commercial in situ oil sands projects are expected to foster rapid expansion of bitumen production.

World oil prices are assumed to remain relatively stable. Any price reductions in the near term are anticipated to be short-lived and not severe enough to affect drilling activity or delay current projects. If there were marked price declines, government steps would be expected to ensure sustained domestic supply and generally stabilize profitability for the domestic oil industry. Apart from short-term effects, oil prices are forecast to increase at the rate of inflation in the latter part of the 1980s and experience modest real price increases in the 1990s.

Throughout the 25-year forecast period, conventional oil supply is generally higher than that shown in ERCB Report 83-E. The main contributors to the increase include substantial infill drilling in both light and heavy oil reservoirs, a nominal increase in the Board's estimates of ultimate potential, and a change in the reserve growth profile of the discoveries/additions category of light crude oil. All of these effects reflect the relatively favorable economics of accelerated development in a mature geological petroleum basin rather than major new discoveries. The net result is a sustained decline in conventional oil supplies over the forecast period.

Production of bitumen from oil sands in situ projects is not expected to be constrained by markets. Diluent (condensate) supply could be a

2 ALBERTA ULTIMATE OIL POTENTIAL

The Board continues to base its long-term forecast of ultimate oil potential on a pricing and fiscal regime that will encourage the development of new technology and extend exploration to acquire additional reserves. In general, the Board's view of the ultimate potential is similar to its previous forecasts except for bitumen. Minor adjustments have been made to reflect conventional discoveries and additions over the intervening period. The results are summarized in Table 2-1. The following outlines specific considerations made in each of the crude oil and equivalent categories. The Board believes the principles discussed in ERCB Report 81-B and updated in ERCB Report 83-E are still applicable to its forecast of the ultimate potential for crude oil sources in Alberta.

2.1 Light* and Heavy Crude Oil

Upon reviewing the reserves added from light discoveries/ additions since its last forecast and projecting potential discoveries in the geological basin, the Board has decided to increase its previous estimate of ultimate potential from future light discoveries/additions and revise its reserves growth profile of light discoveries/additions.

Table 2-1 updates Table 2-1 in ERCB Report 83-E, using estimated year-end 1984 reserves and production data and the aforementioned revision to the light discovery/additions component of ultimate potential.

---

* The term light crude oil replaces the previous term light-medium crude oil. Light crude oil includes all conventional oil lighter than 25° API (904 kg/m^3).

The ultimate potential of 2429 million cubic metres (m^3) for light crude oil and 221 million m^3 for heavy crude oil indicates that the total conventional crude oil ultimate reserves estimate (2650 million m^3) is approaching the upper limit of the Board's previous view that the ultimate potential lies somewhere between 2400 and 2700 million m^3. The Board, however, holds the view that the remaining potential reserves will be more difficult and expensive to acquire than those to date and therefore, concludes that its estimated range of ultimate potential is still valid.

2.2 Pentanes Plus

The ultimate potential of pentanes plus is closely related to the anticipated ultimate potential for natural gas and it is calculated as a combination of established reserves and the Board's forecast of liquids recovery from new discoveries of gas. As shown in column 3 of Table 2-1, the Board's most recent review confirms that the ultimate potential of pentanes plus is some 320 million m^3, of which about 80 per cent has been established to date. The Board expects the rate of future additions, some 63 million m^3, will follow the gradually declining trend of new gas discoveries. The Board also believes that the liquids content of new gas discoveries will be somewhat less than the prevailing average for the province and it is unlikely that many more large, high liquid gas pools amenable to gas cycling for recovery of pentanes plus will be discovered.

2.3 Crude Bitumen

The Board's estimate of ultimate bitumen in place in the Cretaceous sands is now estimated to be about 275 billion m^3 with an additional 125 billion m^3 credited to carbonate deposits, for a total of 400 billion m^3. This consists of about 27 billion m^3 in deposits that are within the area amenable to surface mining, and the remainder in deeper sand and carbonate deposits that require the use of either in situ extraction using wells, or underground mining techniques.

The 1984 year-end ultimate potential of bitumen is shown in columns 4 and 5 of Table 2-1. The total ultimate potential of bitumen from both surface mining and in situ recovery methods is estimated to be some 46 billion m^3, 7 billion m^3 from mining and 39 billion m^3 from in situ production.

The Board notes that the delineation of reserves and exploration of the oil sands are subject to a much greater degree of uncertainty than is normally considered in conventional reserve evaluations. Accordingly, it may be prudent to place higher confidence in the surface mineable reserves until commercial in situ projects are developed and have demonstrated they can recover bitumen within the terms of the present estimate.

In the past, the Board applied a product yield fraction to the ultimate potential for bitumen to estimate the ultimate potential for synthetic crude oil. The inference that virtually all bitumen production would be upgraded was consistent with the early intentions of oil sands developers to construct upgrading facilities coincident with the installation of bitumen recovery facilities, and with the view that significant markets would not likely develop for non-upgraded bitumen. But experience now points to a significant restructuring of North American crude oil markets and indeed it is now apparent that large volumes of non-upgraded bitumen can be successfully marketed. Also, the Board has become increasingly aware of the potential use of heavy conventional oil as upgrader feedstock. These developments were not readily conveyed within the reserve framework used in ERCB Report 83-E. Therefore, commencing with this publication, recoverable volumes of bitumen or heavy oil that may ultimately be used as upgrader feedstock will no longer be forecast as synthetic crude oil equivalent, but rather as the volume of raw feedstock that would be measured at the plant inlet. This revised format is reflected in Table 2-1. The Board will continue to provide forecasts of synthetic crude oil production consistent with existing capacity and present its views on the most likely upgrader investment profile. This forecast is described in section 3.4.

TABLE 2-1 SUMMARY OF THE ULTIMATE POTENTIAL OF CRUDE OIL AND EQUIVALENT - ALL SOURCES[a]
(millions of cubic metres)

	1 Light[b]	2 Heavy	3 Pentanes Plus	4 Bitumen[c] Mining	5 Bitumen[c] In Situ	6 Total
Initial Established	1 944	115	257	5 300	60	7 686
Cumulative Production	1 344	75	147	97	7	1 670
Remaining Established	600	40	110	5 203	53	6 006
Discoveries/ Additions	230	31	63	-	-	324
Tertiary	255	75	-	-	-	330
Future Potential	-	-	-	1 700	38 940	40 640
Ultimate Potential	2 429	221	320	7 000	39 000[d]	48 970
Total Remaining Potential	1 085	146	173	6 903	38 993	47 300

---

[a] Estimate as at 31 December 1984.

[b] Light crude oil includes all conventional oil lighter than 25° API (904 kg/m^3).

[c] Columns show raw bitumen, not SCO as shown in ERCB Report 83-E.

[d] Assumes 33 000 million m^3 from cretaceous sands and 6000 million m^3 from carbonates.

---

3 PRODUCTIVE CAPACITY (SUPPLY)

This section summarizes the expected annual productive capacity or supply of crude oil and equivalent from all sources over the forecast period.

Given the reserves of oil outlined in section 2, the Board reviewed and calculated the rate at which these reserves are expected to be added to established reserves over a 25-year forecast period. The forecast of productive capacity from remaining established reserves used the most current reserves data available and cumulative production statistics to year-end 1983.

A summary of the Board's estimates of growth in Alberta's reserves of conventional oil is shown in Table 3-1. The Board assumed the majority of the remaining potential for new reserves would be added over the forecast period. The productivity from established reserves and supply from new discoveries/additions as well as tertiary operations were used to arrive at the Board's estimate of productive capacity over the forecast period (Table 3-2).

As in the past, the Board used a group of normalized productivity profiles for forecasting conventional crude oil supplies. Typical profiles are reproduced as Figure 3-1. A more detailed review of their development is contained in ERCB Report 81-B. For the purposes of this report, the Board has altered the normalized profile for the light discoveries/additions category to reflect recent evidence in the field.

3.1 Light Crude Oil Supply

3.1.1 Productive Capacity From Established Reserves

This portion of the forecast has been revised upwards to reflect the continuing good performance of several existing pools and the effect of numerous pricing and royalty-related incentives and relaxed policies on allowable controls for new reserves. The actual light mid-1984 productivity was some 9000 m^3/d higher (5 per cent) than predicted in ERCB Report 83-E.

The main factors contributing to the increase in productivity include the following:

(a) Infill Drilling, mainly associated with new miscible flood schemes and conversion of existing waterflood schemes to miscible floods, has contributed some 3000 to 4000 m^3/d of productivity with the majority coming from the Nipisi Gilwood A Pool (some 2800 m^3/d). The majority of the wells were drilled as a result of the combined incentive of NORP pricing and royalty relief for production from miscible flood schemes under section 4.2 of the Petroleum Royalty Regulations. Bellshill Lake is also notable for the large number of natural depletion wells added with an incremental productivity in excess of 500 m^3/d.

(b) The shift from specified allowable limit to good production practice (GPP) by operator choice for some 500 light-medium pools as of mid-1983 allowed productivity of some 1000+ m^3/d to be accessed.

(c) The extension of NORP to wells shut-in for 3 or more years began in early 1983 and some 700 wells qualified under the program. Assuming an average well rate of 3 m^3/d this amendment to the agreement between the federal and provincial governments is estimated to contribute some 2000 m^3/d in

productivity. However, these "stripper" wells are expected to decline rapidly in productivity and a reasonable estimate of sustainable productivity from this well category may be 1000 to 1500 m^3/d.

(d) Reserves additions during 1984 were notably greater than predicted in ERCB Report 83-E as a result of the record number of development wells drilled in 1983 and 1984. No major new pools were found. The reserves additions were mainly from a large number of small pools plus extensions to existing pools throughout the province.

The new reserves normalized productivity profile per million m^3 of recoverable reserves was reassessed in light of recent discoveries/additions. The peak value was increased from 170 to 230 m^3/d per million m^3 recoverable reserves.

Applying the revised peak values and using the general shape of the normalized profile curves presented in ERCB Report 81-B, the most current estimated reserves additions for 1984 yields an additional 3000 m^3/d of productivity relative to that predicted in ERCB Report 83-E.

Other factors affected productivity such as the increase in the basic well rate from 5 m^3/d to 8+ m^3/d. However, their impacts were not readily quantifiable.

A major uncertainty in the forecast continues to be the performance of five major D-3 pools (Acheson, Bonnie Glen, Fenn-Big Valley, Westerose, and Wizard Lake) which are forecast to start declining in the 1985-1986 period. These pools contribute some 30 000 m^3/d of productivity to the provincial total. To the extent that they decline earlier or later than predicted, these pools could have a noteworthy impact on the accuracy of the forecast.

The forecast of productive capacity from remaining established reserves by individual pipeline system is outlined in Appendix A.

3.1.2 Productive Capacity From Discoveries/Additions

As previously discussed in Section 2.1, the ultimate potential from future light discoveries/additions has been revised upwards from that shown in ERCB Report 83-E. With the expectation that drilling activity for oil will remain at current levels over the next 3 years, the reserves acquisition profile has been revised to reflect a higher rate of reserves additions in the first 4 years of the forecast. The profile also now assumes that the majority of the ultimate potential will be acquired by 2010. The revised normalized productivity profile, using a peak capacity of 230 m^3/d per million m^3 of recoverable reserves, was applied to the forecast reserves additions to obtain the predicted productivity from discoveries/additions.

3.1.3 Productive Capacity From Tertiary Additions

The forecast of reserves additions from tertiary schemes has been revised downwards over the period 1985-1988. This change from ERCB Report 83-E reflects the staging of a number of major new miscible flood schemes and thus the spreading of the expected increase in productivity over a number of years. The effect of earlier productivity of certain miscible flooded pools due to advanced infill drilling has been accounted for by adjusting the remaining established reserve productivity profiles of the applied-for, and approved but not fully operational, miscible flood schemes.

3.2 Heavy Crude Oil Supply

3.2.1 Productive Capacity From Established Reserves

The conventional heavy crude oil productivity forecast in ERCB Report 83-E was some 4000 m^3/d below the actual productivity at mid-year

1984. A review of the heavy crude oil pools indicated that a large number are performing better than predicted and thus, reserves were adjusted accordingly. The NORP price incentive and an improved heavy crude oil market encouraged the drilling of a large number of infill and development wells. Due to the nature of the fluid in heavy oil reservoirs, these wells generally add recoverable reserves with the result that there has been an attendant positive adjustment in heavy crude oil productivity.

The heavy crude oil productivity profile for the period 1985-1988 recognizes a continued high level of infill and development drilling in conventional heavy crude oil reservoirs. The proposed Lloydminster heavy oil upgrader would require a large number of additional wells initially and during its operating life in order to sustain required feedstock supplies.

The Lindbergh area, previously considered as part of the conventional heavy crude oil forecast, is now accounted for under crude bitumen production.

3.2.2 Productive Capacity From Discoveries/Additions

The forecast reserves additions and normalized productivity profile were unchanged from ERCB Report 83-E.

3.2.3 Productive Capacity From Tertiary Additions

No change was made to the forecast from that predicted in ERCB Report 83-E. The limited available experimental scheme performance data does not suggest a major shift from the previous forecast. A conservative approach continues to be taken in determining reserves additions from tertiary operations, particularly when the long-term forecast remains very speculative at this time.

3.3 Pentanes Plus Supply

The Board's marketable gas production forecast was updated from ERCB Report 83-E and reflects a more optimistic outlook of long-term markets for Alberta gas based on expected changes in gas prices and regulatory policies governing removal of gas from Alberta and export of gas from Canada. The Gas Energy Management Model (GEMM) results were used to evaluate gas co-product production.

3.3.1 Future Gas Production

The Board's forecast of marketable gas production is shown in column 1 of Table 3-3 and is more optimistic than in ERCB Report 83-E. Canadian markets for Alberta gas are higher as a result of market development incentive payments and gas market incentive pricing. Moreover, domestic economic growth is higher than previously forecast. The overall impact of these factors, however, will be partially offset by energy conservation efforts.

Recent changes in the National Energy Board's export pricing policy have increased gas exports. Further modifications should enhance future gas export volumes, but the realization of the more optimistic forecast will depend upon how successfully Canadian producers compete with their U.S. counterparts, the magnitude of surplus gas capacity in the U.S., and the prices of alternative fuels.

3.3.2 Pentanes Plus Supply

The Board's forecast of pentanes plus supply from established reserves is shown in column 2 of Table 3-3. The Board's studies show that the pentanes plus to gas ratio for such reserves will decline quite rapidly from some 89 m^3 per million m^3 in 1982 to some 55 m^3 per million m^3 by 1995. This reduction is generally a result of declining production from the large cycling pools which have historically produced much of Alberta's pentanes plus. After 1997, the ratio is

expected to increase gradually to some 65 m^3 per million m^3 by the end of the forecast period as gas production from shallow, dry pools declines and deferred reserves, many of which have high liquid contents, are brought on stream.

The pentanes plus to gas ratio for reserves discoveries/additions is estimated to be some 65 m^3 per million m^3. By applying this ratio to the forecast of gas production from reserve discoveries/additions as generated by the GEMM model, the Board derived the supply forecast of pentanes plus shown in column 3 of Table 3-3.

The total pentanes plus supply forecast shown in column 4 of Table 3-3 indicates that pentanes plus production will increase to 18 700 m^3/d in 1989 and then decline throughout the remainder of the forecast period. The supply of segregated pentanes plus is estimated to be some 500 to 1500 m^3/d less than production volumes shown in the near term as a result of requirements for enhanced oil recovery. Moreover, some of the injected pentanes plus would be recovered at a later date.

The marketable gas production and pentanes plus supply profile for the period 1980-2010 as well as the forecast pentanes plus to gas ratio is shown in Figure 3-4.

3.4 Crude Bitumen Production and Synthetic Crude Oil Supply

Compared to the previous forecast, synthetic crude oil supply from mining projects is accelerated to reflect current expectations of the industry. As outlined in Table 3-4, additional supply is assumed during the period 1989-2000 and reflects earlier expansion of existing facilities as well as earlier on-stream dates for additional oil sands plants.

The optimism for bitumen production from in situ operations remains. The acceleration of production to the year 2000 is based on recent developments exemplified by Esso's accelerated phasing of its Cold

Lake project and inclusion of the Lindbergh area under the bitumen category.

The yield of synthetic crude oil (containing butanes and heavier liquid product) from bitumen will vary with the upgrading technology used by companies operating on oil sands leases. The Board estimates that, with the upgrading technology expected, an average yield factor of 0.85 by volume will be achieved.

All new upgraders (those associated with mining projects as well as in situ operations at Cold Lake and Peace River) are forecast to have a 4-year phase-in period to reach design capacity, starting with production at 50 per cent of design capacity. Previously, a 3-year phase-in period was adopted. Other changes to the upgraders and, therefore, the synthetic crude oil forecast, include delaying a Peace River upgrader from 1993 to 1995, and delaying a Cold Lake upgrader from 1990 to 1991 to reflect critical path time constraints. The acceleration of selected mining and in situ projects results essentially in a 2-year advancement of the forecast published in ERCB Report 83-E.

It is important to note that the long-term optimism for bitumen production and synthetic crude oil supply is contingent on development of suitable fiscal regimes that would provide a satisfactory economic basis for the construction and operation of upgrading facilities. The development of new upgrading technology options including smaller, less complex field upgrading might then occur and lead to lower cost, graduated construction phasing. In addition to the foregoing, the rate of development shown in Table 3-4 assumes that the most likely replacement for declining domestic light oil productivity will be SCO produced from Western Canadian heavy crude oil and bitumen. In the event these do not materialize, bitumen production would likely plateau at levels shown for the 1990-1995 period.

3.5 Total Crude Oil and Equivalent Supply

The forecast of total crude oil and equivalent supply for the period 1985-2010 is outlined by product in Table 3-5. Total supply declines marginally until the early 1990s when synthetic crude oil supply increases more than offset the decline in light crude oil supplies. Thereafter, the total supply of crude oil and equivalent holds relatively constant at some 220 thousand m^3/d as increases in synthetic crude oil supply are matched by comparable decreases in conventional oil and pentanes plus supplies.

Total productive capacity of crude oil and equivalent is shown graphically in Figure 3-5.

TABLE 3-1 GROWTH IN RESERVES OF LIGHT AND HEAVY CRUDE OIL 1985-2010 (millions of cubic metres per year)

	1	2	3	4
Year	Light[a]		Heavy	
	Discoveries/Additions	Tertiary	Discoveries/Additions	Tertiary
1985	30	20	2	1
1986	28	20	2	1
1987	25	20	2	2
1988	20	20	2	2
1989	15	17	2	2
1990	10	15	1	2
1991	9	13	1	2
1992	8	11	1	3
1993	7	10	1	3
1994	6	9	1	3
1995	5	8	1	3
1996	5	8	1	3
1997	5	8	1	3
1998	5	7	1	3
1999	5	7	1	3
2000	4	6	1	3
2001	4	6	1	3
2002	4	5	1	3
2003	4	5	1	3
2004	4	5	1	3
2005	4	5	1	3
2006	4	5	1	3
2007	4	4	1	3
2008	4	4	1	3
2009	3	4	*	3
2010	3	3	*	3
	225	245	30	69

---

* Less than 500 x 10^3 m^3.

[a] Light crude oil includes all conventional oil lighter than 25° API (904 kg/m^3)

TABLE 3-2 FORECAST OF LIGHT AND HEAVY CRUDE OIL SUPPLY
1985-2010
(thousands of cubic metres per day)

	1	2	3	4	5	6	7	8	9	10
Year	Light[a]				Heavy					
	Est. Res.	Dis./ Add.	Tert.	Total	Est. Res.	Dis./ Add.	Tert.	Exp.	Total	TOTAL
1985	142	7	1	150	16	1	*	1	19	169
1986	125	12	2	139	14	1	1	1	18	157
1987	110	17	4	131	13	2	1	1	17	148
1988	96	22	6	124	11	2	2	1	17	141
1989	85	25	8	118	10	3	2	1	16	134
1990	75	26	10	111	9	3	3	1	16	127
1991	67	26	12	105	8	3	3	1	15	120
1992	60	26	14	100	7	3	4	1	15	115
1993	54	26	15	95	6	3	4	1	14	109
1994	48	25	15	88	6	3	5	1	15	103
1995	44	24	16	84	5	3	6	1	15	99
1996	39	23	16	78	5	3	6	1	15	93
1997	36	22	17	75	4	3	6	1	14	89
1998	33	21	17	71	3	3	7	1	14	85
1999	30	20	17	67	3	3	7	1	14	81
2000	27	20	17	64	3	3	7	1	14	78
2001	25	19	17	61	2	3	7	1	13	74
2002	23	18	17	58	2	3	7	1	13	71
2003	20	17	17	54	2	3	8	1	14	68
2004	19	17	17	53	1	3	8	1	13	66
2005	18	16	17	51	1	3	8	1	13	64
2006	16	16	17	49	1	3	8	1	13	62
2007	15	15	17	47	1	3	8	1	13	60
2008	14	15	16	45	1	3	7	1	12	57
2009	13	14	16	43	*	2	6	1	9	52
2010	12	14	15	41	*	2	5	1	8	49

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* Less than 500 m^3/d.

[a] Light crude oil includes all conventional oil lighter than 25° API (904 kg/m^3).

TABLE 3-3 FORECAST OF MARKETABLE GAS PRODUCTION AND PENTANES PLUS SUPPLY
1985-2010
(Pentanes Plus: Thousands of cubic metres per day)
(Gas: Millions of cubic metres per day @ 37.4 MJ/m^3)

	1	2	3	4
		Pentanes Plus		
Year	Gas	Established Reserves	Discoveries/ Additions	Total
1985	208	16.8	0.0	16.8
1986	216	16.8	0.1	16.9
1987	229	17.0	0.2	17.2
1988	250	17.8	0.2	18.0
1989	272	18.5	0.2	18.7
1990	280	18.2	0.3	18.5
1991	282	17.1	0.7	17.8
1992	285	16.0	1.1	17.1
1993	287	15.0	1.6	16.6
1994	283	13.7	2.1	15.8
1995	272	12.6	2.4	15.0
1996	259	11.6	2.6	14.2
1997	240	10.5	2.7	13.2
1998	222	9.7	2.7	12.4
1999	204	8.7	2.9	11.6
2000	201	8.0	3.6	11.6
2001	194	6.9	4.4	11.3
2002	184	6.2	4.9	11.1
2003	177	5.4	5.4	10.8
2004	164	4.8	5.4	10.2
2005	154	4.1	5.6	9.7
2006	144	3.8	5.4	9.2
2007	130	3.3	5.2	8.5
2008	122	2.9	5.0	7.9
2009	113	2.5	5.0	7.5
2010	105	2.1	5.0	7.1

TABLE 3-4 FORECAST OF CRUDE BITUMEN PRODUCTION AND SYNTHETIC CRUDE OIL SUPPLY

1985-2010
(thousands of cubic metres per day)

	1	2	3	4	5
Year	Gross Bitumen	Synthetic Crude Oil			Non-upgraded Bitumen
		Mining	In Situ	Total	
1985	42.7	27.0	-	27.0	9.3
1986	48.6	28.0	-	28.0	13.9
1987	54.6	28.0	-	28.0	19.9
1988	62.1	31.0	-	31.0	23.9
1989	69.4	32.7	-	32.7	29.2
1990	75.6	33.6	-	33.6	34.4
1991	87.6	37.6	9.0	46.6	31.7
1992	97.8	43.8	11.0	54.8	31.7
1993	108.1	47.5	14.0	61.5	34.5
1994	113.6	49.2	17.0	66.2	34.0
1995	121.0	50.0	21.3	71.3	35.4
1996	123.3	50.0	23.0	73.0	35.7
1997	130.1	54.3	24.7	79.0	35.5
1998	134.0	56.0	25.5	81.5	36.4
1999	139.9	57.7	25.5	83.2	40.3
2000	146.9	62.8	34.5	97.3	31.3
2001	152.1	64.5	36.5	101.0	31.5
2002	159.1	70.5	39.5	110.0	28.5
2003	162.1	73.0	42.5	115.5	24.5
2004	167.3	74.7	42.5	117.2	27.7
2005	173.3	79.8	46.8	126.6	22.7
2006	175.3	81.5	48.5	130.0	20.7
2007	180.5	83.2	50.2	133.4	21.9
2008	181.5	84.0	51.0	135.0	20.9
2009	181.5	84.0	51.0	135.0	20.9
2010	186.5	88.3	51.0	139.3	20.9

TABLE 3-5 FORECAST OF TOTAL CRUDE OIL AND EQUIVALENT SUPPLY - ALL PRODUCTS
(thousands of cubic metres per day)

Year	1 Light[a]	2 Heavy	3 Pentanes Plus	4 Synthetic	5 Non-upgraded Bitumen	6 Total
1985	150	19	17	27	9	222
1986	139	18	17	28	14	216
1987	131	17	17	28	20	213
1988	124	17	18	31	24	214
1989	118	16	19	33	29	215
1990	111	16	19	34	34	214
1991	105	15	18	47	32	217
1992	100	15	17	55	32	219
1993	95	14	17	62	35	223
1994	88	15	16	66	34	219
1995	84	15	15	71	35	220
1996	78	15	14	73	36	216
1997	75	14	13	79	36	217
1998	71	14	12	82	36	215
1999	67	14	12	83	40	216
2000	64	14	12	97	31	218
2001	61	13	11	101	32	218
2002	58	13	11	110	29	221
2003	54	14	11	116	25	220
2004	53	13	10	117	28	221
2005	51	13	10	127	23	224
2006	49	13	9	130	21	222
2007	47	13	9	133	22	224
2008	45	12	8	135	21	221
2009	43	9	8	135	21	216
2010	41	8	7	139	21	216

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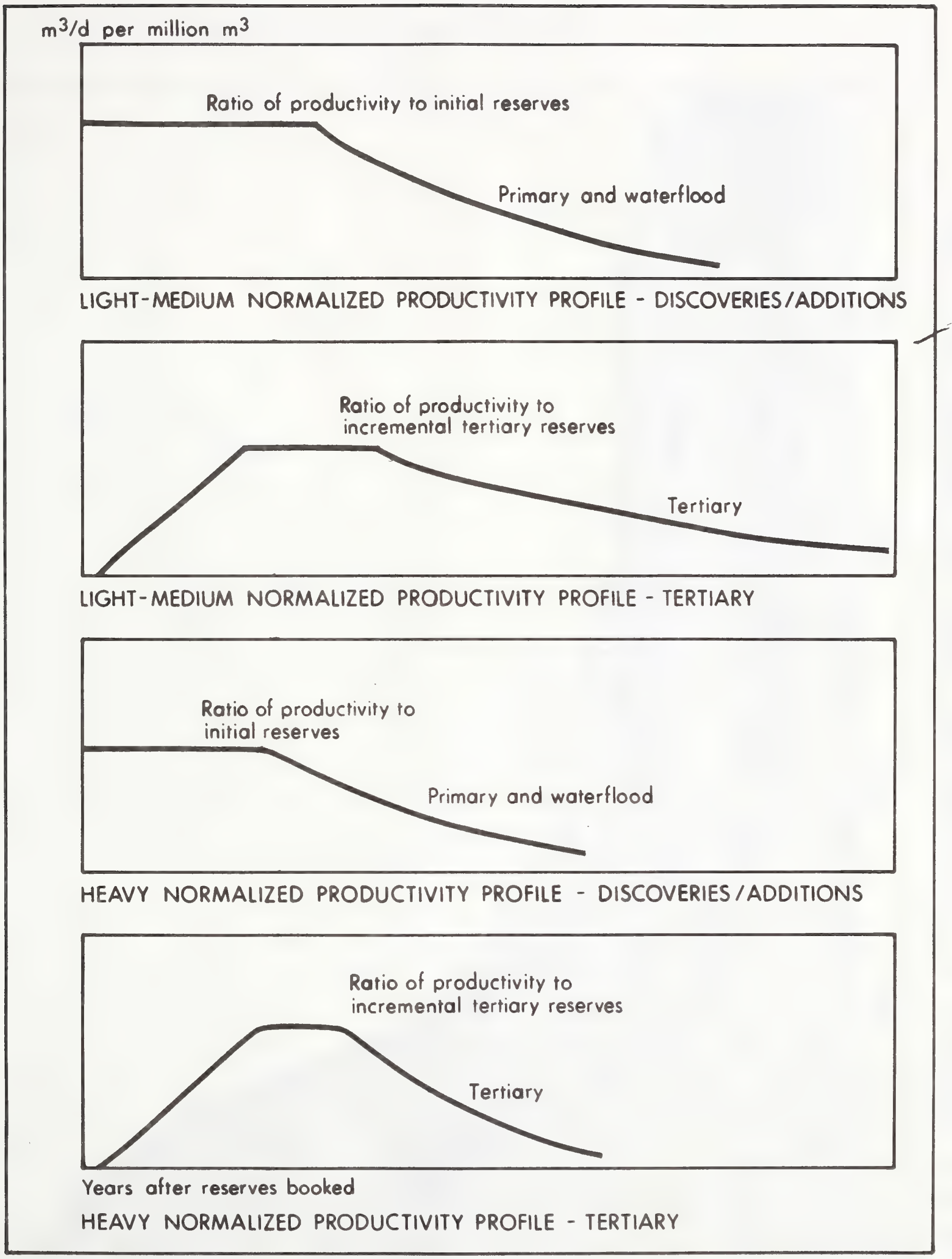
[a] Light crude oil includes all conventional oil lighter than 25° API (904 kg/m^3)



LIGHT-MEDIUM NORMALIZED PRODUCTIVITY PROFILE - DISCOVERIES/ADDITIONS

LIGHT-MEDIUM NORMALIZED PRODUCTIVITY PROFILE - TERTIARY

HEAVY NORMALIZED PRODUCTIVITY PROFILE - DISCOVERIES/ADDITIONS

HEAVY NORMALIZED PRODUCTIVITY PROFILE - TERTIARY

FIGURE 3-1 NORMALIZED PRODUCTIVITY PROFILES

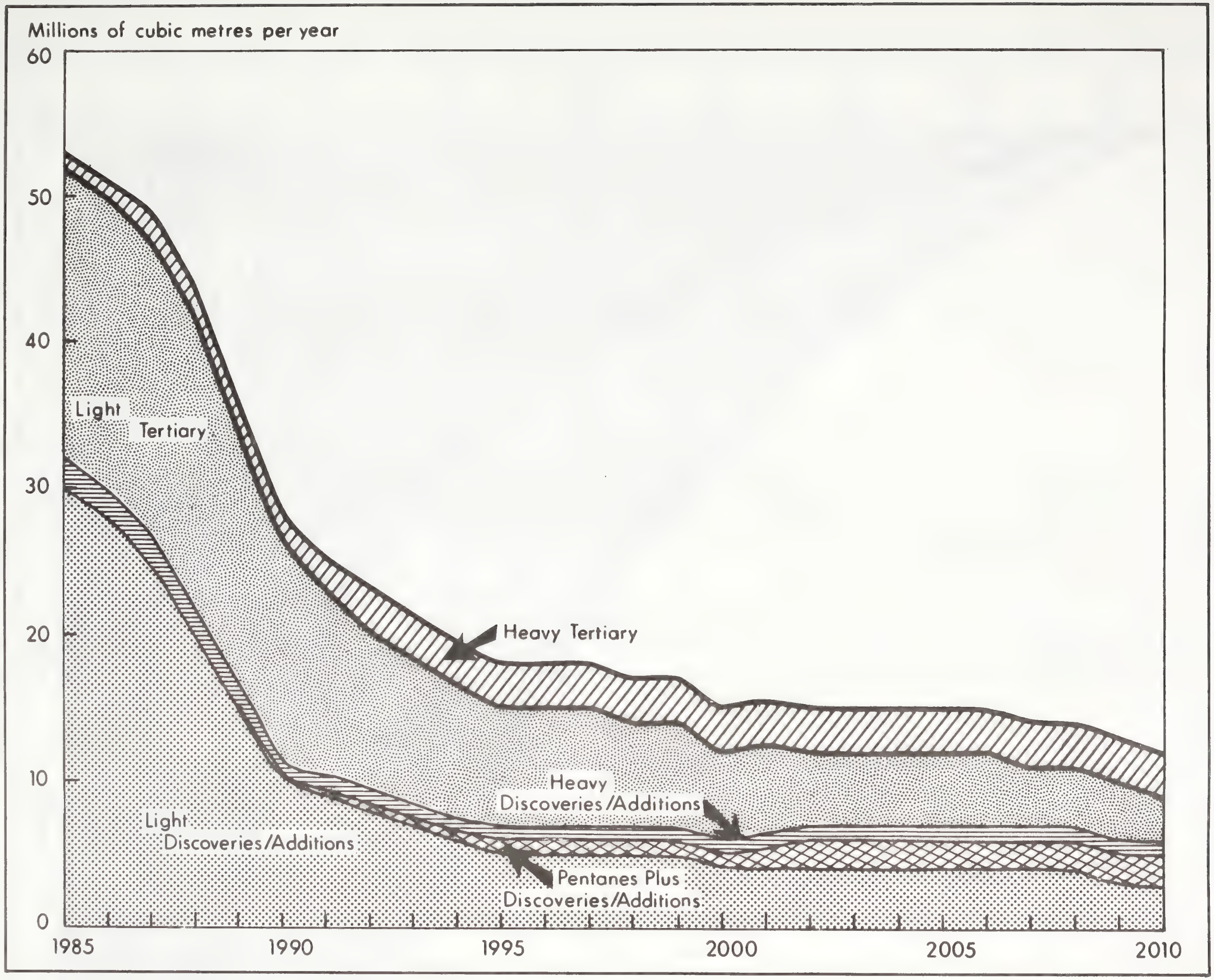


FIGURE 3-2 GROWTH OF CONVENTIONAL CRUDE OIL RESERVES 1985-2010

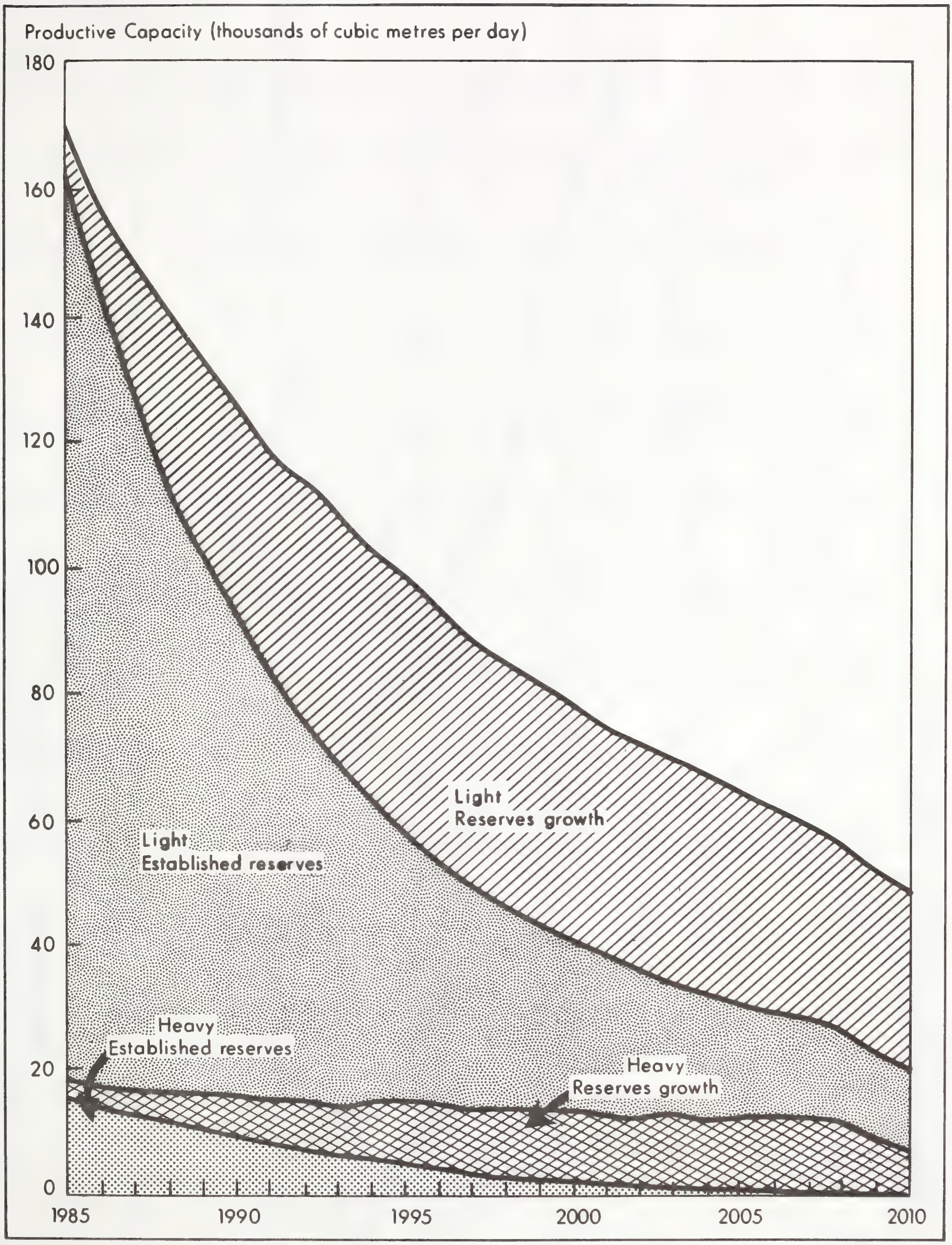
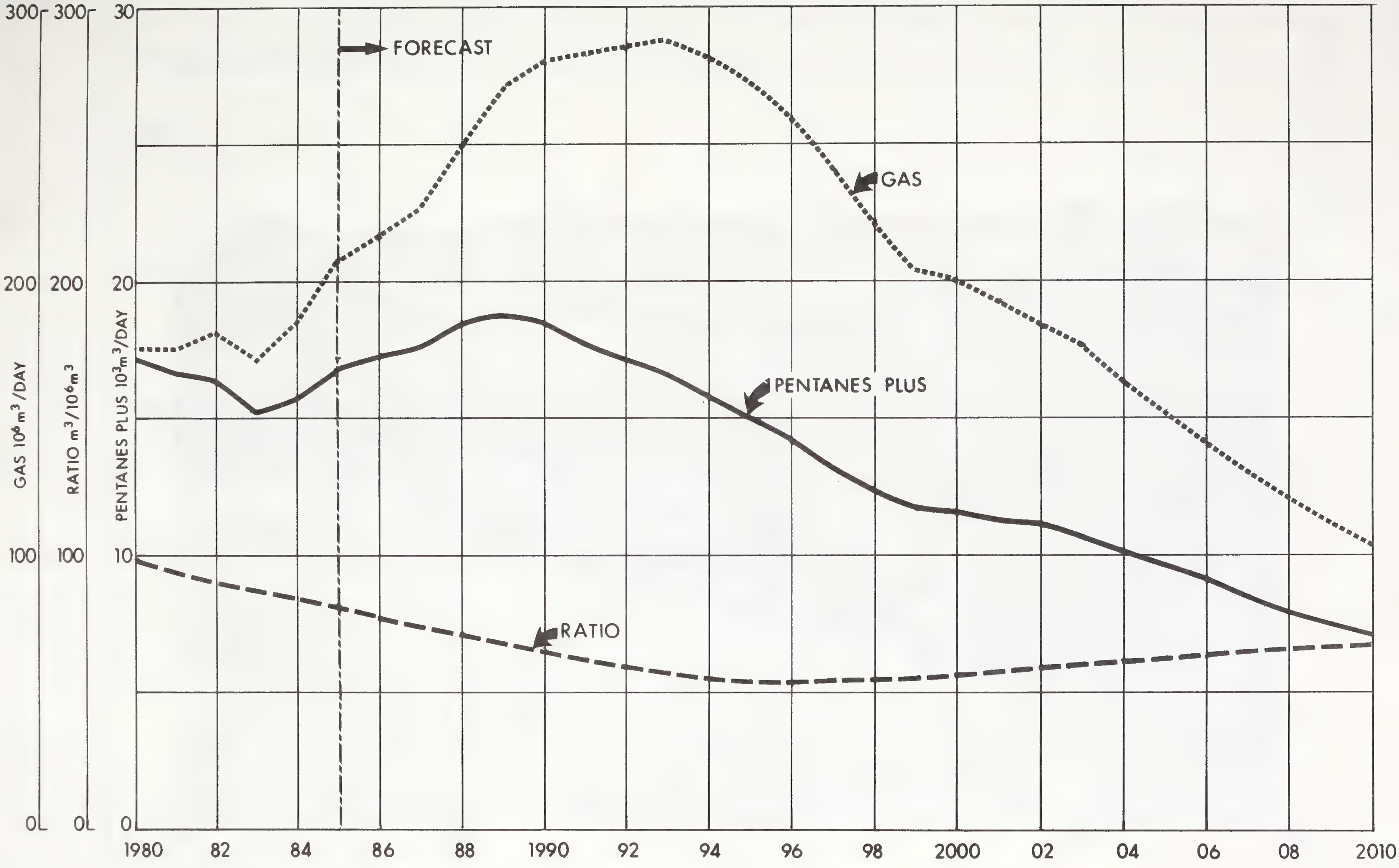


FIGURE 3-3 TOTAL SUPPLY OF CONVENTIONAL CRUDE OIL 1985-2010



NOTE: GAS is marketable gas at 37.4 Megajoules/m^3
RATIO is cubic metres of pentanes plus per million cubic metres of marketable gas.
PENTANES PLUS includes volumes injected or to be injected in solvent--flood schemes.

FIGURE 3-4 GAS PRODUCTION AND PENTANES PLUS SUPPLY 1980 -2010

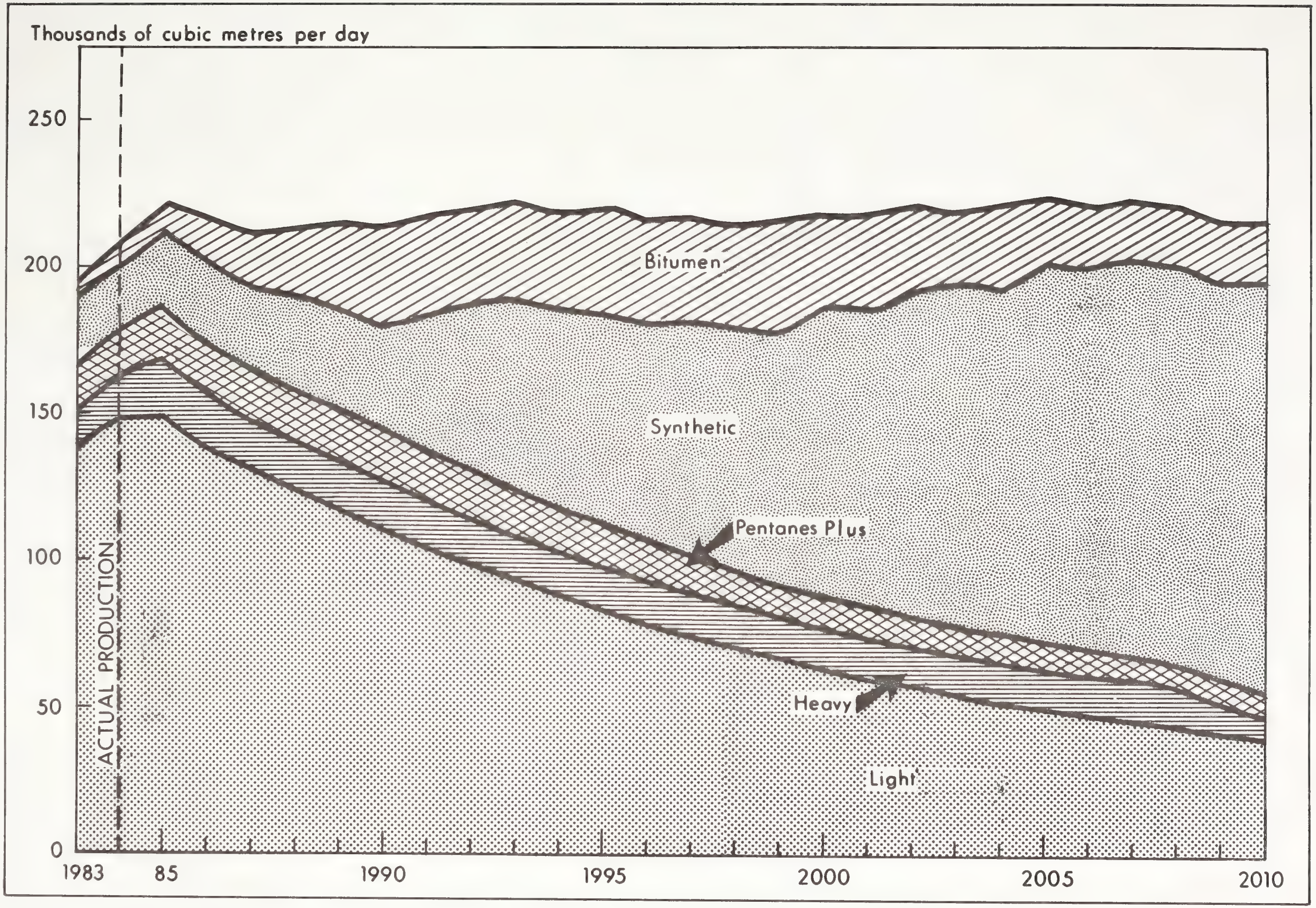


FIGURE 3-5 TOTAL PRODUCTIVE CAPACITY OF ALBERTA'S CRUDE OIL AND EQUIVALENT
All products 1983 - 2010

PROVINCIAL SUMMARY
FORECAST OF PIPELINE PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983

Pipeline	Table	Productive Capacity - m^3/d										
		1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Light & Medium Crude Oil												
Alberta Oil Sands-Redwater	1	3 738	3 094	2 627	2 232	1 897	1 616	1 377	612	278	117	-
Bow River Pipeline	2	1 451	1 349	1 275	1 201	1 135	1 076	1 015	763	526	370	254
Cremona Pipeline	3	3 130	2 900	2 620	2 309	2 035	1 791	1 578	797	379	149	33
Federated Pipeline	4	19 996	18 663	16 986	15 502	14 183	13 007	11 958	8 106	5 740	4 205	3 187
Gibson Petroleum Company	5	1 480	1 176	964	817	708	625	558	341	251	198	163
Gulf Alberta Pipeline	6	14 099	12 548	10 216	8 407	7 004	5 887	4 967	2 455	1 264	872	540
Imperial (Ellerslie)	7	3 483	3 304	3 132	2 843	2 269	1 830	1 496	612	308	218	163
Imperial (Excelsior)	8	326	259	209	170	138	114	94	22	14	5	-
Imperial (Leduc)	9	948	717	505	364	273	213	115	45	10	6	-
Murphy Oil Company	10	613	577	519	468	424	383	346	203	131	85	27
Norcen Energy Resources	11	900	823	722	634	557	489	429	224	117	-	-
Peace Pipeline Ltd.	12	14 897	14 030	12 682	11 428	10 287	9 283	8 382	5 089	3 024	2 046	1 247
Pembina Pipeline Ltd.	13	23 490	23 459	21 867	19 844	17 905	16 101	14 364	8 558	5 658	3 893	2 870
Rainbow Pipeline	14	24 648	23 408	21 415	19 260	17 308	15 585	14 060	8 518	5 297	3 448	2 273
Rangeland Pipeline	15	8 225	7 599	6 936	6 346	5 808	5 260	4 747	2 921	1 756	1 185	877
Texaco Canada Resources	16	20 945	19 182	14 223	10 657	8 059	6 151	4 743	1 499	501	236	111
Twining Pipeline	17	794	721	662	609	563	522	483	344	230	189	158
Valley Pipeline	18	490	472	444	418	394	371	349	259	192	142	105
Truck and Tank Car	19	8 550	7 804	6 899	6 104	5 400	4 781	4 236	2 302	1 294	218	164
Total Light & Medium		152 203	142 085	124 903	109 613	96 347	85 085	75 297	43 670	26 970	17 582	12 172

PROVINCIAL SUMMARY
FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983

Pipeline	Table	Productive Capacity - m^3/d										
		1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Heavy Crude Oil												
Bow River Pipeline	20	9 488	8 458	7 492	6 636	5 873	5 203	4 623	2 556	1 398	534	263
BP Pipeline	21	1 334	1 190	1 062	945	841	749	667	377	127	31	-
Husky Oil Pipeline	22	3 888	3 553	3 203	2 887	2 606	2 356	2 128	1 272	615	280	84
Murphy Oil - Milk River	23	13	11	10	9	8	7	6	3	2	-	-
Murphy Oil - Manito	24	353	315	274	239	209	184	161	82	24	-	-
Peace Pipeline Ltd.	25	32	32	31	29	27	26	24	18	13	10	7
Pembina Pipeline Ltd.	26	36	31	27	24	21	19	16	8	4	-	-
Rangeland Pipeline Company	27	21	18	15	14	12	10	9	4	-	-	-
Truck and Tank Car	28	2 843	2 547	2 268	2 021	1 802	1 606	1 433	812	464	58	43
Total Heavy		18 008	16 155	14 382	12 804	11 399	10 160	9 067	5 132	2 647	913	397
Total Crude Oil		170 211	158 240	139 285	122 417	107 746	95 245	84 364	48 802	29 617	18 495	12 569

TABLE 1

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR ALBERTA OIL SANDS PIPELINE - REDWATER (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Redwater U-M-L Vik A	371	286	85	80	73	66	59	54	49	29	18	-	-
Redwater Lower Vik B	400	317	60	60	60	60	60	60	59	36	22	13	-
Redwater D-3	128 000	7 914	3 550	2 916	2 459	2 073	1 748	1 474	1 243	530	226	96	-
Others	240	174	43	38	35	33	30	28	26	17	12	8	-
Total			3 738	3 094	2 627	2 232	1 897	1 616	1 377	612	278	117	-

TABLE 2

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR BOW RIVER PIPELINE (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Cessford Banff B	680	591	90	90	90	90	90	90	90	83	50	31	-
Enchant Lower Mann G	240	223	100	87	74	63	53	46	39	17	-	-	-
Halkirk East Field	602	586	69	69	66	63	61	59	56	46	38	31	25
Killam Glauconitic S	460	439	58	58	58	58	58	58	58	58	38	23	14
Long Coulee Field	136	124	20	20	19	18	17	16	15	12	9	7	6
Provost Cummings A	239	153	60	54	48	42	37	33	29	16	-	-	-
Provost Vk CAK & Mann E	10 100	3 457	748	666	621	579	540	503	469	331	233	164	116
Provost Field Other	900	665	88	87	84	80	77	74	71	58	48	39	32
Youngstown Arcs	525	269	55	55	55	55	55	55	52	31	19	-	-
Others	1 749	1 464	163	163	160	153	147	142	136	111	91	75	61
Total			1 451	1 349	1 275	1 201	1 135	1 076	1 015	763	526	370	254

TABLE 3

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR CREMONA PIPELINE (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Crossfield Cardium A	3 030	253	95	89	82	75	68	62	57	-	-	-	-
Crossfield Field Other	828	519	99	96	90	85	80	75	71	52	39	29	21
Crossfield East Card C	417	240	85	77	70	63	57	52	47	28	-	-	-
Garrington Card A&B-27%	872	182	50	45	42	39	37	35	32	25	-	-	-
Garrington Mann D-27%	90	78	36	36	32	26	21	17	14	-	-	-	-
Garrington Viking A-27%	284	231	69	69	69	69	65	56	48	23	-	-	-
Garrington Wabamun A-27%	327	53	20	18	16	14	12	10	9	4	2	-	-
Garr Field Other-27%	341	157	36	36	34	32	30	28	26	20	15	-	-
Harmattan East Rundle	13 100	3 374	1 020	932	835	748	670	600	538	310	179	103	-
Harmattan East Viking E	950	876	355	355	350	287	234	192	157	58	-	-	-
Harmattan Elk Rundle C	11 200a	2 890	1 075	970	843	732	637	553	481	238	118	-	-
Westward Ho Rundle A	1 760	182	102	90	77	65	56	48	40	-	-	-	-
Others			88	87	80	74	68	63	58	39	26	17	12
Total			3 130	2 900	2 620	2 309	2 035	1 791	1 578	797	379	149	33

ERCB RESERVE

a 10 200

TABLE 4
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR FEDERATED PIPELINES LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Carson Ck North BHL A	7 200a	3 130	1 200	1 010	826	676	553	452	370	135	49	-	-
Carson Ck North BHL B	20 100	5 911	1 475	1 344	1 228	1 122	1 026	937	857	546	348	222	141
Judy Creek BHL A	54 600	11 958	2 065	1 829	1 680	1 546	1 427	1 321	1 225	868	641	489	383
Judy Creek BHL B	18 600	4 382	800	725	665	613	566	523	485	344	254	194	152
Judy Creek Viking A	900	374	170	149	127	108	92	79	67	30	-	-	-
Meekwap D-2 A	4 200	1 793	650	612	527	453	390	335	289	136	64	30	-
Swan Hills BHL C	26 000b	9 194	1 450	1 412	1 318	1 232	1 152	1 079	1 011	739	551	417	320
Swan Hills BHL A&B	114 000c	35 058	6 200	5 971	5 472	5 025	4 622	4 259	3 931	2 692	1 906	1 386	1 032
Swan Hills S BHL A&B	77 500d	28 569	3 665	3 333	3 116	2 919	2 738	2 573	2 422	1 825	1 415	1 124	910
Virginia Hills Belloy A	3 810	3 095	1 065	1 057	910	783	674	580	499	235	111	52	25
Virginia Hills BHL	25 200	6 661	1 160	1 138	1 044	960	885	818	757	531	387	291	224
Others	763	275	96	83	73	65	58	51	45	25	14	-	-
Total			19 996	18 663	16 986	15 502	14 183	13 007	11 958	8 106	5 740	4 205	3 187

ERCB RESERVE

a 6 790
b 32 500
c 127 000
d 81 600

TABLE 5

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
GIBSON PETROLEUM COMPANY LIMITED (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Bellshill Lk Blairmore	11 400a	4 885	1 325	1 038	841	708	611	538	480	313	232	184	153
Thompson Lk Blairmore	794	204	96	82	71	61	52	45	39	-	-	-	-
Others	346	297	59	56	52	48	45	42	39	28	19	14	10
Total			1 480	1 176	964	817	708	625	558	341	251	198	163

ERCB RESERVE

a 9 540

TABLE 6

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR GULF ALBERTA PIPELINE CO. LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Bashaw D-3 A	482	91	65	50	39	30	24	18	14	-	-	-	-
Buffalo Lake D-3	776	126	54	46	39	33	28	24	20	9	4	-	-
Buffalo Lake D-3 B	470	262	79	68	61	55	49	44	40	23	13	8	4
Chig Mann E & Up Mann A	580	392	90	87	84	80	77	74	71	58	-	-	-
Clive D-2 A	3 370	1 475	300	300	280	261	244	227	212	149	105	74	52
Clive D-3 A	6 970	2 556	640	624	570	521	476	435	397	253	162	103	-
Drumheller D-2 A	1 630	413	193	164	139	117	98	83	70	30	-	-	-
Drumheller D-2 B	2 300a	1 095	635	543	423	328	255	199	154	44	-	-	-
Drumheller Field Other	252	184	33	32	30	29	27	26	25	19	15	12	-
Duhamel D-2 A	1 120b	202	80	70	61	53	46	40	35	17	-	-	-
Duhamel D-3 B	1 480c	318	127	111	95	82	71	61	52	24	12	-	-
Erskine D-3	3 830	441	125	121	113	105	98	91	85	60	-	-	-
Ewing Lake D-2 D	450	179	56	50	45	41	37	34	31	18	11	-	-
Fenn-Big Valley D-2 A	51 800	12 019	7 700	6 650	4 916	3 633	2 685	1 985	1 467	324	-	-	-
Fenn D-3 F	2 150	358	210	172	136	108	86	68	54	17	-	-	-
Fenn West D-2 A	1 270	246	171	134	104	81	63	49	38	-	-	-	-
Fenn West D-3 E	796	724	235	235	235	235	235	214	158	35	8	-	-
Fenn West Field Other	1 482	1 352	153	145	139	133	128	123	118	97	79	65	53
Ghost Pine Field	330	171	45	42	40	37	34	32	30	21	15	-	-
Haynes D-2 A & D-3 A	334	116	50	43	37	33	28	25	21	11	-	-	-
Hussar Glauconitic A	3 270	621	280	245	207	174	147	124	104	45	-	-	-

TABLE 6 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
GULF ALBERTA PIPELINE CO. LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Hussar Field Other	1 232	648	106	106	105	100	95	90	86	67	52	41	31
Joffre Viking	6 160	452	90	80	75	71	66	62	59	45	35	29	-
Joffre D-2	9 640	3 247	380	354	337	322	307	293	281	228	188	157	134
Mikwan Field	508	399	98	90	83	77	71	65	60	40	27	18	-
Parflesh Low Mann C	617	291	95	95	89	76	66	56	48	23	11	5	-
Stettler D-2 A	4 200	374	135	124	113	103	95	86	79	50	-	-	-
Stettler D-3 A	3 690	758	270	232	206	183	162	144	127	70	38	-	-
Wayne-Rosedale Field	1 658	1 166	226	226	213	199	185	173	161	114	80	56	40
West Drumheller D-2 A	4 660	498	275	234	195	163	136	114	95	-	-	-	-
West Drumheller D-3 A	825	117	50	44	38	33	28	25	21	10	-	-	-
Wintering Hills Field	968	503	56	56	56	56	55	52	50	41	34	28	23
Wood River D-2 C	518	265	90	80	70	61	54	47	41	22	11	6	3
Others	13 489	5 399	907	895	843	794	748	704	663	491	364	270	200
Total			14 099	12 548	10 216	8 407	7 004	5 887	4 967	2 455	1 264	872	540

ERCB RESERVE

a 1 640
b 1 020
c 1 230

TABLE 7
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
IMPERIAL PIPELINE CO. (ELLERSLIE) (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Acheson D-3 A	19 900	4 315	1 850	1 850	1 850	1 708	1 259	930	688	152	-	-	-
Acheson E Blairmore B	597	314	135	121	106	93	82	72	63	-	-	-	-
Armisie Blairmore	326	126	65	54	45	38	31	26	22	9	-	-	-
Golden Spike D-3 A	30 200a	2 700	370	350	321	297	275	257	241	183	148	124	107
Morinville D-3 B	2 140b	942	475	387	316	259	212	173	142	52	19	7	-
St Albert-Big Lk D-3 A	2 400	319	58	51	48	45	43	40	38	28	21	15	11
St Albert D-3 B	1 050	229	85	74	65	56	49	42	37	18	9	5	-
Yekau Lake D-3 A	835	263	100	86	75	65	57	49	43	21	11	-	-
Others	4 140	1 543	345	331	306	282	261	241	222	149	100	67	45
Total			3 483	3 304	3 132	2 843	2 269	1 830	1 496	612	308	218	163

ERCB RESERVES

a 33 500
b 1 530

TABLE 8
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
IMPERIAL PIPELINE CO. (EXCELSIOR) (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Excelsior D-2	4 270	221	150	118	92	71	56	43	34	-	-	-	-
Fairydell-Bon Acc D-3 A	1 830	164	110	83	65	51	39	31	24	-	-	-	-
Peavey Blairmore	232	87	25	22	20	19	17	16	14	9	6	-	-
Others	762	141	41	36	32	29	26	24	22	13	8	5	-
Total			326	259	209	170	138	114	94	22	14	5	-

TABLE 9

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR IMPERIAL PIPELINE CO. (LEDUC) (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Leduc-Woodbend D-2 A	14 200	213	80	76	69	62	56	51	46	-	-	-	-
Leduc-Woodbend D-3 A	38 700	740	750	534	338	213	135	86	-	-	-	-	-
Leduc-Woodbend D-3 F	723	178	50	46	41	37	34	31	28	17	10	6	-
Others	5 748	231	68	61	57	52	48	45	41	28	-	-	-
Total			948	717	505	364	273	213	115	45	10	6	-

TABLE 10
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR MURPHY OIL COMPANY LTD. - MILK RIVER (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Coutts Moulton A	673	262	58	58	53	49	46	42	39	26	17	12	8
Manyberries Sunburst A	376	171	100	89	73	59	49	40	32	-	-	-	-
Manyberries Sunburst Q	494	417	119	111	100	91	82	74	67	41	25	15	-
Turin Field	753	647	153	143	132	122	112	104	96	64	43	29	-
Others	1 923	746	183	176	161	147	135	123	112	72	46	29	19
Total			613	577	519	468	424	383	346	203	131	85	27

TABLE 11
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
NORCEN ENERGY RESOURCES LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Joarcam Viking	17 200	2 565	900	823	722	634	557	489	429	224	117	-	-

TABLE 12
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR PEACE PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Ante Creek BHL	3 200a	1 603	285	285	285	285	285	285	274	166	101	61	37
Ante Creek BHL B	715	451	230	188	154	126	103	84	69	25	9	-	-
Carrot Creek Cardium F	366	339	95	83	75	68	61	55	50	30	18	11	7
Carrot Creek Cardium K	202	195	60	55	49	44	40	36	32	18	11	-	-
Carrot Ck L Mann M Jur O&P	368	298	53	50	48	45	43	41	39	30	24	18	14
Carrot Ck Field Other	595	441	92	85	80	76	71	67	63	47	35	26	-
Cherhill Banff I	820	148	65	55	47	40	35	30	26	12	-	-	-
Cherhill Banff M	378	351	77	77	77	74	67	60	54	33	20	12	7
Cherhill Field Other	1 822	1 285	112	112	112	108	105	102	99	85	73	63	54
Edson Cardium P	211	149	80	68	59	51	44	37	32	-	-	-	-
Edson Field Other	1 593	944	136	135	131	128	124	120	117	100	86	74	-
Fox Creek BHL A	375	263	105	90	77	67	57	49	42	20	10	5	-
Gift Slave Point A	995	965	211	211	211	205	185	167	152	92	56	34	20
Goose River BHL A	7 780	2 780	860	742	664	595	533	477	428	247	142	82	47
Grande Pr Halfway A	480	463	106	106	106	97	88	80	72	44	27	16	10
Kakwa A Cardium A	766	689	150	150	150	148	134	121	109	66	40	24	15
Kaybob BHL A	20 000	5 721	1 250	1 185	1 094	1 010	932	860	794	532	357	239	160
Kaybob S Triassic A	16 000	6 453	1 750	1 593	1 441	1 304	1 179	1 067	965	585	355	215	130
Nipisi Gilwood A-40%	20 280	7 230	2 800	2 800	2 377	1 984	1 656	1 383	1 154	468	190	77	-
Nipisi Keg R SS A-40%	197	63	36	29	24	19	16	13	10	-	-	-	-
Nipisi Keg R SS D-40%	140	96	32	29	25	22	19	17	15	8	4	2	1

TABLE 12 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEACE PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Nipisi Field Other	525	286	43	43	42	40	38	36	34	26	21	16	12
Pine Creek Cardium H&I	610	363	65	65	65	65	65	65	65	51	31	-	-
Red Earth Slave Pt A	820	440	82	79	75	71	68	64	61	48	37	29	-
Red Earth Granite Wash A	4 320	1 694	338	320	298	278	259	241	225	159	112	79	55
Red Earth Granite Wash E	981b	332	62	58	55	51	48	46	43	32	23	17	13
Red Earth Field Other	2 200	1 299	183	183	179	171	162	154	147	114	89	69	54
Rycroft Charlie Lake A	118	99	50	47	38	31	26	21	17	-	-	-	-
Simonette D-3	6 000c	643	310	257	214	179	149	125	104	42	-	-	-
Snipe Lake BHL WF	10 500d	2 970	520	467	430	396	367	340	317	228	173	135	108
Spirit River Field	956	938	207	207	207	207	207	207	193	91	43	20	10
Sturgeon Lake D-3	3 530	443	205	167	142	121	103	88	75	34	-	-	-
Sturgeon Lake S D-3	24 900	7 138	1 835	1 763	1 595	1 443	1 306	1 181	1 069	648	393	238	144
Tangent D-1 A	194	168	57	57	57	54	44	36	29	11	4	-	-
Tangent D-1 E	270	257	80	80	80	80	71	58	47	17	6	2	-
Utikuma Lk Keg R SS A-16%	952	347	193	176	136	106	82	64	50	14	-	-	-
Utikuma Lk Keg R SS N-16%	163	104	48	48	43	34	26	20	16	4	-	-	-
Utikuma Lk Field Other-16%	431	356	62	59	56	52	49	47	44	32	24	18	13
Valhalla Doe Creek I	2 080e	2 020	235	235	235	235	235	235	235	235	207	125	76
Valhalla Field Other	353	332	31	31	31	31	31	31	31	31	25	19	15
Wembley Halfway B	860	615	275	275	230	188	154	126	103	38	-	-	-
Wembley Field Other	318	296	64	62	58	53	49	45	42	28	19	13	8

TABLE 12 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR PEACE PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Windfall Rundle A	416	157	64	53	45	39	34	29	25	12	6	3	-
Windfall D-3 A	2 950	1 031	386	342	297	258	224	195	169	84	42	-	-
Others	9 538	5 882	917	828	788	749	713	678	645	502	391	304	237
Total			14 897	14 030	12 682	11 428	10 287	9 283	8 382	5 089	3 204	2 046	1 247

ERCB RESERVE

a	3 560
b	1 090
c	5 580
d	12 400
e	2 970

TABLE 13
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEMBINA PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Bigoray Cardium B	945	775	195	192	174	157	142	129	117	71	43	26	16
Bigoray Ostracod	1 010	277	65	63	59	55	51	48	44	31	22	-	-
Bigoray Nisku A	333	220	98	93	76	62	51	41	34	12	5	2	-
Bigoray Nisku B	900	629	140	140	140	140	140	140	126	59	28	13	6
Bigoray Nisku C	368	320	10	100	100	100	86	73	62	28	12	5	2
Bigoray Nisku E	900	692	85	85	85	85	85	85	85	85	78	37	17
Bigoray Nisku F	1 350	750	399	394	307	238	185	144	112	32	9	3	-
Bigoray Nisku G	338	221	110	110	87	67	52	41	32	9	3	-	-
Bigoray Nisku H	924	799	155	155	155	155	155	155	155	86	40	19	9
Bigoray Nisku I	260	182	77	77	64	52	43	35	29	10	4	-	-
Bigoray Nisku K	340	230	100	100	81	67	55	45	36	13	5	-	-
Bigoray Field Other	659	574	83	83	83	79	75	72	68	53	41	32	25
Brazeau R Nisku A	3 980	2 637	1 178	1 101	901	737	603	494	404	148	54	20	7
Brazeau R Nisku B	1 200	859	355	355	301	246	202	165	135	50	18	7	-
Brazeau R Nisku D	1 590	1 178	375	375	375	375	318	260	212	78	28	10	4
Brazeau R Nisku E	1 500	1 010	444	425	348	284	233	190	156	57	21	8	3
Brazeau R Nisku I	369	276	70	67	60	55	49	45	40	25	15	9	6
Brazeau R Field Other	418	258	123	107	90	76	64	54	46	20	-	-	-
Crystal Viking A	2 960	2 677	600	600	600	588	532	482	436	264	160	97	-
Cyn-Pem Cardium A	2 330	539	255	224	187	156	130	108	91	37	-	-	-

TABLE 13 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEMBINA PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Cyn-Pem Cardium D	383	317	100	100	100	88	76	66	56	26	13	-	-
Cyn-Pem Cardium E	208	188	61	61	58	50	43	37	32	15	7	-	-
Highvale Banff A	350	262	65	65	60	54	49	44	40	24	15	9	5
Highvale Lower Mann A	795	661	110	110	110	110	110	110	110	91	55	-	-
Highvale Field Other	932	879	86	86	86	86	84	82	79	68	59	51	44
Minnehik-Buck Lake Field	748	642	160	146	136	127	118	110	103	72	51	-	-
Niton Basal Quartz B	1 700a	866	140	140	140	140	139	128	118	82	61	47	37
Pembina Key Belly R B	8 200b	2 739	585	544	507	473	441	411	383	270	190	134	85
Pembina Key Belly R C	3 080	1 319	345	328	300	274	251	229	209	133	85	54	-
Pembina Belly R I	1 370c	512	110	110	110	110	110	110	103	62	38	-	-
Pembina Key Belly R L	812d	377	70	70	70	70	70	70	70	50	30	-	-
Pembina Key Belly R M	1 370e	450	103	103	103	103	103	96	87	53	32	-	-
Pembina Key Belly R U	1 960f	1 065	190	181	172	164	156	148	141	110	86	67	52
Pembina Key Belly R X	1 160g	825	128	128	128	128	128	128	128	118	72	43	-
Pembina Belly R FFF&GGG	354	276	75	75	69	62	56	51	46	28	17	-	-
Pembina Cardium	239 000	84 491	7 530	6 772	6 288	5 858	5 490	5 139	4 842	3 688	2 942	2 416	2 027
Pembina Viking B	141	119	69	55	45	37	30	25	20	-	-	-	-
Pembina Ostracod E	442	331	153	153	135	111	90	74	61	-	-	-	-
Pembina Nisku A	1 430	937	423	423	385	299	232	181	140	40	11	3	-
Pembina Nisku C	715	440	212	212	175	136	106	83	64	18	5	-	-

TABLE 13 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEMBINA PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Pembina Nisku D	2 550	1 679	676	676	596	487	399	326	267	98	36	13	-
Pembina Nisku E	230	170	60	60	60	53	44	36	29	11	4	-	-
Pembina Nisku G	2 100	1 681	621	621	614	503	411	336	275	101	37	14	5
Pembina Nisku H	234	203	69	69	60	51	44	38	33	15	7	3	2
Pembina Nisku J	564	402	100	100	100	100	99	85	73	34	16	8	3
Pembina Nisku K	1 700	1 307	350	350	350	350	305	262	226	107	50	24	11
Pembina Nisku L	2 500	1 955	585	585	585	505	435	374	322	152	72	34	16
Pembina Nisku M	2 140	1 917	633	633	558	481	413	356	306	144	68	32	15
Pembina Nisku N	1 040	988	10	300	300	300	300	300	242	79	26	8	3
Pembina Nisku O	1 190	1 106	300	300	300	299	257	221	190	90	42	20	10
Pembina Nisku P	3 190	3 013	750	750	750	750	736	633	545	257	121	57	27
Pembina Nisku Q	2 350	2 290	10	695	695	695	695	695	560	184	60	20	6
Pembina Nisku R	192	171	57	57	57	55	45	36	30	11	4	2	-
Pembina Nisku S	350	303	104	104	104	95	78	64	52	19	7	2	-
Pembina Field Other	2 465	1 666	323	314	296	279	263	247	233	172	128	95	70
Thorsby Glauconitic A	396	344	55	55	55	55	55	55	55	38	23	14	9
Westpem Nisku A	1 990	1 569	589	589	570	467	382	312	255	94	34	13	5
Westpem Nisku C	2 600	2 077	769	769	758	621	508	415	340	125	46	17	6
Westpem Nisku D	1 540	1 191	456	456	431	353	288	236	193	71	26	9	4
Willesden Green Card A	18 900	8 453	1 008	951	877	810	753	701	656	490	383	311	260

TABLE 13 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEMBINA PIPELINE LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial $10^3\ m^3$	Remaining $10^3\ m^3$	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Willesden Green Vk A	365	137	67	59	52	45	40	35	31	-	-	-	-
Willesden Green Field Other	868	519	86	78	74	71	67	64	61	48	37	29	22
Others	1 581	1 127	180	180	175	165	155	146	138	102	76	56	41
Total			23 490	23 459	21 867	19 844	17 905	16 101	14 364	8 558	5 658	3 893	2 870

ERCB RESERVE

a	2 620	e	1 820
b	9 650	f	2 090
c	2 290	g	1 930
d	1 160		

TABLE 14
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
RAINBOW PIPELINE COMPANY LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Evi Field	2 462	2 147	356	356	356	356	356	356	356	252	153	93	56
Golden Slave Point A	3 100	1 578	450	422	378	338	303	271	243	140	81	47	27
Mitsue Gilwood A	55 400	18 249	4 850	4 850	4 637	4 112	3 647	3 234	2 867	1 572	862	473	259
Nipisi Gilwood A-60%	30 420	10 846	4 200	4 200	3 566	2 977	2 485	2 074	1 732	702	284	115	-
Nipisi Keg R SS A-60%	296	95	53	44	36	29	23	19	16	-	-	-	-
Nipisi Keg R SS D-60%	210	144	48	43	38	33	29	26	22	12	6	3	2
Nipisi Field Other-60%	787	428	65	65	62	59	56	53	51	40	31	24	19
Rainbow Muskeg I	270	125	50	47	38	31	26	21	17	6	2	-	-
Rainbow Keg River B	30 800	13 775	2 050	1 818	1 729	1 645	1 565	1 488	1 416	1 102	859	669	521
Rainbow Keg River F	19 100	5 790	1 950	1 717	1 507	1 323	1 162	1 020	895	467	243	127	66
Rainbow Keg River I	3 260	1 083	420	360	310	267	229	197	170	80	38	18	8
Rainbow Keg River K	623	255	62	58	53	49	44	41	37	24	15	10	6
Rainbow Keg River S	664	225	90	77	66	57	49	42	36	17	8	-	-
Rainbow Keg River U	845	227	84	74	64	55	48	42	36	18	9	4	-
Rainbow Keg River	610	269	60	53	49	45	42	38	36	24	16	11	7
Rainbow Keg River II	2 620	1 015	120	139	159	180	180	180	180	111	65	38	23
Rainbow Keg River MM	644	564	150	150	150	150	136	117	100	47	22	11	5
Rainbow Keg River PP	288	141	55	47	40	35	30	26	22	10	5	2	-
Rainbow I.S. No. 1	26 800	10 453	2 300	2 050	1 892	1 746	1 612	1 488	1 374	921	617	413	277
Rainbow I.S. No. 2	4 860	1 577	835	676	547	443	359	290	235	82	29	-	-
Rainbow I.S. No. 11	12 200a	3 457	495	495	495	495	495	495	495	415	251	152	92

TABLE 14 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
RAINBOW PIPELINE COMPANY LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Rainbow Field Other	5 204	2 822	487	460	433	408	384	362	341	252	187	139	103
Rainbow S Keg River A	2 000b	398	60	60	60	60	60	60	60	45	27	16	10
Rainbow S Keg River B	5 210	2 270	460	460	460	460	421	380	344	209	126	77	46
Rainbow S Keg River E	2 810c	768	180	180	168	152	138	125	113	68	41	25	15
Rainbow S Keg River G	1 370d	422	75	75	75	75	75	75	68	41	25	15	9
Rainbow S Keg River H	400	158	80	65	53	44	36	29	24	9	3	-	-
Rainbow S Keg River J	300	299	50	50	50	50	50	50	50	31	19	11	7
Rainbow S Keg River N	525e	331	59	59	59	59	59	59	53	32	20	12	7
Rainbow S Field Other	1 348	1 006	197	187	174	163	152	141	132	93	65	46	32
Seal Slave Point A	560	385	125	125	117	100	86	74	64	30	14	7	-
Shekilie Field	3 560f	2 687	426	426	402	379	357	336	316	234	174	129	95
Slave Slave Point G	648	540	145	145	145	145	135	116	100	47	22	11	-
Slave Slave Point H	492	490	60	120	120	120	120	120	106	47	21	9	4
Utikuma Lk Keg R SS A	4 998	1 820	1 012	921	717	557	433	337	261	74	-	-	-
Utikuma Lk Keg R SS N	857	545	252	252	227	176	137	107	82	24	-	-	-
Utikuma Lk Field Other	2 261	1 868	326	311	292	276	260	244	230	171	126	93	69
Virgo Field	7 425	3 123	502	460	438	417	396	377	359	279	217	169	132
Zama Field	15 014	6 028	1 101	1 003	945	890	838	789	743	551	408	302	224
Others	5 792	3 734	308	308	308	304	295	286	278	239	206	177	152
Total			24 648	23 408	21 415	19 260	17 308	15 585	14 060	8 518	5 297	3 448	2 273

ERCB RESERVE

a	16 300	d	1 820
b	3 080	e	1 750
c	4 010	f	5 080

TABLE 15
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
RANGELAND PIPELINE COMPANY LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Caroline Cardium E	2 000	1 359	400	400	400	400	400	358	293	107	-	-	-
Caroline Viking A	1 180	452	142	132	121	112	104	96	88	59	-	-	-
Ferrier Belly River A	397	174	57	49	45	40	36	33	30	18	11	-	-
Ferrier Cardium D	3 220a	1 823	265	265	256	238	223	209	197	150	119	98	83
Ferrier Cardium E	4 910	2 954	425	388	360	336	315	295	277	212	169	139	116
Ferrier Cardium G	3 370b	2 785	355	355	355	355	338	317	299	226	180	148	124
Ferrier Field Other	656	284	63	63	60	57	55	52	49	38	30	-	-
Garr Cardium A&B-73%	2 358	493	135	122	114	107	99	93	88	66	-	-	-
Garr Mann D-73%	244	211	99	99	85	69	57	47	38	-	-	-	-
Garr Viking A-73%	766	624	186	186	186	186	175	150	130	61	-	-	-
Garr Wabamun A-73%	883	742	53	49	42	36	32	28	24	12	6	-	-
Garr Field Other-73%	922	425	97	97	91	86	81	76	72	53	39	-	-
Gilby Basal Mann B	1 470c	608	90	86	79	74	70	65	62	48	38	32	28
Gilby Jurassic B	3 670	1 419	274	259	236	216	199	183	169	119	88	68	54
Gilby Field Other	4 263	825	202	196	181	167	154	142	131	88	59	-	-
Innisfail D-3	11 800	1 353	900	695	540	420	326	254	197	-	-	-	-
Lanaway Field	866	510	81	81	78	75	71	68	64	50	39	30	24
Medicine River Glauc A	2 110	816	290	277	245	217	193	171	152	83	-	-	-
Medicine River Jur A	1 900d	385	165	142	122	105	90	78	67	31	-	-	-
Medicine River Jur C	2 300e	1 103	220	205	187	171	157	145	134	94	70	54	43
Medicine River Jur D	2 500f	1 116	180	180	178	163	149	138	127	89	66	51	40

TABLE 15 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
RANGELAND PIPELINE COMPANY LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Medicine R Pekisko E	791	348	69	66	61	57	53	50	46	33	23	16	11
Medicine R Pekisko I	1 330	655	130	130	130	130	130	119	108	65	40	24	15
Medicine R Pekisko N	750	610	90	90	90	90	90	90	90	74	45	27	17
Medicine River Viking D	252	219	95	83	72	62	53	46	39	18	-	-	-
Medicine R Field Other	2 497	1 050	255	249	230	213	196	181	167	112	75	50	-
Ricinus Cardium A	2 880	1 924	404	359	321	289	262	238	218	146	105	79	61
Ricinus Cardium L	750	347	85	85	79	71	65	58	53	32	19	12	7
Ricinus Cardium W	429	290	75	75	75	75	70	60	52	24	12	5	3
Ricinus Field Other	1 658	988	215	210	193	179	165	152	140	94	63	42	28
Sundre Rundle A	5 420g	956	385	329	286	248	216	187	163	81	40	-	-
Sundre Rundle B	687	168	76	65	54	46	39	33	27	12	-	-	-
Sylvan Lake Elkton C	715	309	80	79	71	64	58	53	48	29	18	11	-
Sylvan Lake Pekisko B	2 300	967	230	226	207	189	172	158	144	92	58	37	24
Sylvan Lake Pekisko C	787	362	60	60	56	53	50	47	44	33	24	18	13
Sylvan Lake Field Other	1 961	936	200	188	175	163	152	142	132	93	66	46	33
Tindastoll Belly River A	280	248	50	50	50	50	50	50	45	27	16	10	-
Willesden Green Card A	8 100	3 623	432	408	376	347	323	301	281	210	164	133	111
Willesden Gr Field Other	372	223	37	34	32	30	29	27	26	20	16	12	10

TABLE 15 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
RANGELAND PIPELINE COMPANY LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Wimborne D-3 A	2 930h	749	400	318	260	213	174	142	117	43	-	-	-
Others	1 213	867	150	144	135	127	120	113	106	79	58	43	32
Total			8 225	7 599	6 936	6 346	5 808	5 260	4 747	2 921	1 756	1 185	877

ERCB RESERVES

a	3 580	e	3 100
b	4 810	f	3 080
c	1 630	g	5 160
d	1 800	h	2 550

TABLE 16
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
TEXACO CANADA RESOURCES LTD. (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Bonnie Glen D-3 A	84 700	16 354	10 800	10 215	7 156	5 024	3 527	2 476	1 738	297	-	-	-
Glen Park D-3 A	3 520a	683	365	343	267	208	162	125	98	28	-	-	-
Westerose D-3	22 100	6 147	4 200	3 844	2 688	1 887	1 325	931	653	111	-	-	-
Wizard Lake D-3 A	59 000	14 341	5 580	4 780	4 112	3 538	3 045	2 619	2 254	1 063	501	236	111
Total			20 945	19 182	14 223	10 657	8 059	6 151	4 743	1 499	501	236	111

ERCB RESERVE

a 3 350

TABLE 17
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
TWINING PIPELINE (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Twining Rdl A&Low Mann A	6 050a	3 630	480	447	419	392	371	350	330	257	209	175	148
Twining Field Other	532	329	79	71	65	60	55	51	47	32	21	14	10
Twining North Rundle	1 500	596	235	203	178	157	137	121	106	55	-	-	-
Total			794	721	662	609	563	522	483	344	230	189	158

ERCB RESERVE

a 7 120

TABLE 18

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR VALLEY PIPELINE (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Turner Valley Rundle	24 000a	2 655	490	472	444	418	394	371	349	259	192	142	105

ERCB RESERVE

a 22 300

TABLE 19

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
TRUCK AND TANK CAR (LIGHT-AND-MEDIUM CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Bonanza Boundary A	485	341	163	142	122	105	90	78	67	-	-	-	-
Boundary Lk S Tria C	686	380	56	54	51	49	46	44	42	33	25	20	15
Boundary Lk S Tria E	4 030	1 949	400	381	355	331	309	288	269	189	133	94	66
Boundary Lk S Tria H	723	584	76	76	75	73	70	67	64	53	43	35	29
Pouce Coupe S Bnd B	624	542	150	142	130	119	109	99	91	58	37	-	-
Undefined & Conf	22 853	21 161	7 500	6 820	5 987	5 256	4 614	4 051	3 556	1 855	967	-	-
Others	2 744	1 345	205	189	179	171	162	154	147	114	89	69	54
Total			8 550	7 804	6 899	6 104	5 400	4 781	4 236	2 302	1 294	218	164

TABLE 20
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR BOW RIVER PIPELINE (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Alderson Field	2 630	1 589	463	418	378	342	309	280	253	153	93	56	-
Atlee-Buffalo U Mann G	272	230	75	70	62	55	49	43	38	21	11	-	-
Atlee-Buffalo Fld Other	88	43	8	7	7	6	6	6	6	4	3	3	-
Bantry Mannville A	6 710a	1 782	520	491	444	402	364	329	298	181	109	-	-
Bantry Mannville D	1 200b	378	120	109	99	89	81	73	66	40	24	-	-
Bantry Field Other	847	526	123	115	106	98	90	84	77	52	35	23	16
Cessford Bsl Col A	2 430c	752	110	110	110	110	110	110	110	76	56	43	33
Cessford Mannville C	2 670d	910	330	287	254	225	200	177	157	86	47	-	-
Cessford Field Other	825	418	65	65	63	60	57	54	52	40	31	24	19
Chin Coulee Bsl Mann A	891	180	95	85	74	65	58	50	44	-	-	-	-
Countess Upper Mann B	1 360e	392	152	134	116	101	88	76	66	33	16	-	-
Countess Upper Mann D	5 870f	1 734	675	595	512	441	379	326	281	132	63	-	-
Countess Upper Mann H	2 230g	487	190	163	142	123	107	93	81	40	20	-	-
Countess Upper Mann O	1 200	689	190	170	153	139	126	114	103	62	38	23	14
Countess Field Other	894	291	87	82	74	66	59	53	47	27	16	-	-
Grand Forks Up Mann B	1 240	470	160	146	128	112	99	86	76	40	21	11	-
Grand Forks Low Mann A	1 130h	760	305	266	229	197	169	146	125	59	28	-	-
Grand Forks Low Mann D	5 980i	2 267	950	802	683	582	495	422	360	161	72	32	-
Grand Forks Low Mann E	1 530	836	365	303	258	220	187	160	136	61	27	-	-

TABLE 20 (Cont'd)
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
BOW RIVER PIPELINE (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Grand Forks Low Mann F	263	150	55	48	42	37	32	28	25	13	7	-	-
Grand Forks Low Mann G	944j	596	256	217	185	157	134	114	97	44	19	-	-
Grand Forks Low Mann K	2 040k	840	381	318	268	226	191	161	136	58	25	-	-
Grand Forks Low Mann II	286	270	110	98	84	73	62	54	46	22	-	-	-
Grand Forks Sawtooth D	73	58	22	21	18	16	14	12	10	5	-	-	-
Grand Forks Field Other	1 187	567	214	193	168	146	127	110	96	47	24	-	-
Hays Low Mann A	1 620	324	135	118	101	87	75	64	56	26	-	-	-
Hays Low Mann C	300	210	69	61	54	48	42	38	33	18	10	6	-
Horsefly Lake Mannville	1 200	335	119	111	99	89	80	71	64	37	-	-	-
Jenner Upper Mann O	206	141	66	53	45	38	32	27	23	10	-	-	-
Lathom Upper Mann A	2 100	610	270	228	193	162	137	115	97	42	18	-	-
Lathom Upper Mann C	358	159	50	44	40	36	32	28	26	15	8	5	-
Little Bow Upper Mann U	235	208	75	74	64	55	47	41	35	17	8	-	-
Little Bow Upper Mann W	155	137	60	53	45	38	32	28	24	11	-	-	-
Little Bow Field Other	1 388	969	129	118	113	109	104	100	96	79	65	53	43
Provost Upper Mann B	714l	393	87	81	75	70	65	61	57	40	28	20	-
Provost Upper Mann BB	304	260	82	74	66	59	53	48	43	25	14	-	-
Provost Field Other	1 084	871	185	177	165	154	143	134	125	88	62	44	31
Retlaw Field	426	252	35	31	30	29	28	27	26	21	17	14	11
Suffield Upper Mann J	300	211	75	66	59	52	46	41	36	20	11	-	-

TABLE 20 (Cont'd)

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
BOW RIVER PIPELINE (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Suffield Field Other	388	264	89	82	73	65	57	51	45	25	14	-	-
Taber Mannville D	2 440	831	201	188	174	160	148	136	126	84	57	38	-
Taber North Glauc A	2 800	2 601	343	343	343	331	304	279	258	181	134	103	82
Taber North Glauc C	434	367	65	61	57	54	51	48	45	33	25	18	14
Taber North Taber D	345	211	85	74	63	55	47	40	35	16	8	-	-
Taber North Field Other	711	310	110	97	86	76	68	60	53	29	16	-	-
Taber South Mann A	1 230m	371	93	87	81	74	69	63	59	39	26	18	-
Taber South Mann B	2 050n	279	114	99	86	74	65	56	49	24	-	-	-
Turin Lower Mann L	344	177	70	62	54	47	41	36	31	15	-	-	-
Turin Upper Mann C	309	202	85	72	62	53	46	39	34	16	-	-	-
Wrentham Lower Mann B	291	132	48	42	37	32	28	25	22	11	6	-	-
Wrentham Lower Mann C	281	132	49	44	39	34	30	27	23	12	-	-	-
Others	4 691	1 864	678	605	531	467	410	359	316	165	86	-	-
Total			9 488	8 458	7 492	6 636	5 873	5 203	4 623	2 556	1 398	534	263

ERCB RESERVE

a	6 390	e	1 280	i	5 440	m	1 370
b	925	f	5 100	j	590	n	1 950
c	2 700	g	1 940	k	1 260		
d	2 430	h	663	l	1 020		

TABLE 21

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR BP PIPELINE (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Chauvin Mannville A	1 240	214	76	71	64	58	53	48	43	26	-	-	-
Chauvin Field Other	395	305	99	90	81	72	65	58	52	30	17	-	-
Chauvin S Lloyd C	285	153	50	43	39	35	31	28	25	15	8	-	-
Chauvin S Sparky A&B	1 690	686	172	154	143	132	121	112	104	69	47	31	-
Chauvin S Sparky E	768	378	155	133	116	101	88	76	66	33	-	-	-
Chauvin S Sparky H	784	385	145	129	113	99	87	76	67	35	-	-	-
Chauvin S Field Other	729	369	128	116	105	95	86	78	71	43	-	-	-
David Lloydminster A	709	368	128	116	102	89	78	69	60	31	16	-	-
David Lloydminster C	446	370	125	111	99	88	78	69	61	33	18	-	-
Hayter Dina A-38%	378	320	114	103	91	80	70	62	54	28	15	-	-
Hayter Dina B-38%	194	137	62	55	47	40	34	29	25	11	-	-	-
Hayter Sparky A-38%	127	51	20	17	15	14	13	11	10	6	-	-	-
Hayter Field Other-38%	76	52	20	17	16	14	13	11	10	6	-	-	-
Others	214	116	40	35	31	28	24	22	19	11	6	-	-
Total			1 334	1 190	1 062	945	841	749	667	377	127	31	-

TABLE 22

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
HUSKY OIL PIPELINE (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Lloydminster Sparky B	759	412	85	80	75	71	66	63	59	44	32	24	-
Lloydminster Sparky G	863a	479	180	166	146	128	112	99	87	45	-	-	-
Lloydminster Sparky K	840	465	170	152	135	120	106	94	83	46	-	-	-
Lloyd Sparky C & GPA	1 460	412	135	127	115	104	94	86	77	47	-	-	-
Lloyd Sparky GP C & D	3 630	1 120	220	216	205	195	186	177	168	131	102	-	-
Lloydminster Field Other	2 202	901	229	218	203	189	177	165	153	108	76	-	-
Morgan Lloydminster A	478	338	168	147	126	109	94	81	69	-	-	-	-
Morgan Sparky A	308	230	84	75	67	59	52	46	41	23	-	-	-
Vermilion Sparky A	678	243	86	77	70	63	57	52	47	29	-	-	-
Viking Kinsella Wain B	4 550	1 496	650	555	478	411	354	304	262	123	-	-	-
Wain Wain & Sparky A	12 200b	4 029	1 105	1 021	924	836	756	684	619	375	228	138	84
Wainwright Field Other	421	323	122	113	101	89	79	70	62	34	-	-	-
Wildmere Lloyd A & Spar E	2 910	1 856	462	432	399	368	340	313	289	194	130	87	-
Wildmere Field Other	471	306	71	66	61	57	53	50	46	33	23	16	-
Others	727	417	121	108	98	88	80	72	66	40	24	15	-
Total			3 888	3 553	3 203	2 887	2 606	2 356	2 128	1 272	615	280	84

ERCB RESERVE

a	575
b	11 200

TABLE 23

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
MURPHY OIL COMPANY LTD. (MILK RIVER) (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Others	155	36	13	11	10	9	8	7	6	3	2	-	-

TABLE 24

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
MURPHY OIL COMPANY LTD. (MANITO) (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Hayter Dina A-62%	617	521	186	169	148	130	114	100	88	46	24	-	-
Hayter Dina B-62%	316	223	102	89	76	64	55	47	40	18	-	-	-
Hayter Sparky A-62%	208	84	33	28	25	22	20	18	16	9	-	-	-
Hayter Field Other-62%	125	86	32	29	25	23	20	19	17	9	-	-	-
Total			353	315	274	239	209	184	161	82	24	-	-

TABLE 25
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEACE PIPELINE LTD. (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Others	312	203	32	32	31	29	27	26	24	18	13	10	7

TABLE 26
SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL
FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR
PEMBINA PIPELINE LTD. (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Others	180	97	36	31	27	24	21	19	16	8	4	-	-

TABLE 27

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR RANGELAND PIPELINE COMPANY LTD. (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Others	125	53	21	18	15	14	12	10	9	4	-	-	-

TABLE 28

SUMMARY OF FORECAST OF PIPELINE SYSTEM PRODUCTIVE CAPACITY OF CONVENTIONAL CRUDE OIL FROM REMAINING RESERVES AS OF 31 DECEMBER 1983 FOR TRUCK AND TANK CAR (HEAVY CRUDE OIL)

Pool	Reserves Used In Forecast		Productive Capacity - m^3/d										
	Initial 10^3 m^3	Remaining 10^3 m^3	1984	1985	1986	1987	1988	1989	1990	1995	2000	2005	2010
Alexis Banff A	800	534	80	77	73	69	66	63	60	46	36	28	22
Glenevis Banff	1 630	449	105	96	88	81	75	69	64	43	29	19	13
Sibbald Upper Mann C	410	312	110	98	87	77	68	61	54	30	16	-	-
Undefined & Conf	7 350	7 350	2 500	2 232	1 979	1 755	1 557	1 380	1 224	671	368	-	-
Others	288	234	48	44	41	39	36	33	31	22	15	11	8
Total			2 843	2 547	2 268	2 021	1 802	1 606	1 433	812	464	58	43

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